

**AMENDMENTS TO THE CLAIMS**

The following listing of claims will replace all prior versions and listings of claims in the application.

**LISTING OF CLAIMS**

1. (Currently Amended) A method for generating a virtual anatomic environment for use in a computer based visual simulation of minimally invasive surgery, comprising the steps of:

providing a main virtual anatomic environment, and

selecting a local anatomic environment from a predefined library comprising a set of two or more separately modelled local anatomic environments,

including the selected local anatomic environment in said main virtual anatomic environment to form said virtual anatomic environment,

thereby allowing generation of different virtual environments.

2. (Previously Presented) A method according to claim 1, wherein said set of local anatomic environments is arranged to represent a set of anatomic variations for a critical internal area, occurring in living beings.

3. (Previously Presented) A method according to claim 1, wherein the step of selecting a local anatomic environment from a predefined library comprising two or more of simulated local anatomic environments further comprises the step of randomly selecting one of

the local anatomic environments in the library.

4. (Previously Presented) A method according to claim 3, wherein the probability of randomly selecting a certain local anatomic environment essentially corresponds with the degree of occurrence of that local anatomic environment in living beings.

5. (Currently Amended) A method according to claim 1, wherein the main virtual anatomic environment is arranged to model an internal cavity of a human, ~~such as an abdominal cavity or a chest cavity~~, while the set of local anatomic environments is arranged to simulate different arrangements of arteries, veins and ducts around an organ arranged in said internal cavity, ~~such as a gall bladder or a heart~~.

6. (Currently Amended) A method according to claim 1, further comprising the step of selecting, by user selection, a certain one of said local anatomic environments from said library and including it into said ~~main~~ virtual anatomic environment.

7. (Previously Presented) A device for generating a virtual anatomic environment for use in a computer based visual simulation of minimally invasive surgery, comprising:

    a modelling device for providing a main virtual anatomic environment,  
    a library, comprising a set of two or more separately modelled local anatomic environments, and  
    means for incorporating one of the local anatomic environments of the library into the

main virtual anatomic environment, together forming said virtual anatomic environment, thereby allowing generation of different virtual environments.

8. (Currently Amended) A device according to claim 7, further comprising a selection device for selecting one of said local anatomic environments from said library to be included in said main-virtual anatomic environment.

9. (Currently Amended) A device according to claim 8, wherein the selection device is arranged to randomly select one of said local anatomic environments from said library to be included in said main-virtual anatomic environment.

10. (Previously Presented) A device according to claim 9, wherein the selection device is arranged to randomly select one of said local anatomic environments in such a way that the probability of selecting a certain local anatomic environment essentially corresponds with the degree of occurrence of that local anatomic environment in human beings.

11. (Currently Amended) A device according to claim 7, wherein the main virtual anatomic environment is arranged to model an internal cavity of a human, ~~such as an abdominal cavity or a chest cavity~~, while the set of local anatomic environments is arranged to simulate different arrangements of arteries, veins and ducts around an organ arranged in said internal cavity, ~~such as a gall bladder or a heart~~.

12. (Previously Presented) A computer-based minimal-invasive surgery simulation system, comprising a device for generating a virtual anatomic environment as described in claim 7.

13. (Previously Presented) A method according to claim 2, wherein the step of selecting a local anatomic environment from a predefined library comprising two or more of simulated local anatomic environments further comprises the step of randomly selecting one of the local anatomic environments in the library.

14. (Currently Amended) A method according to claim 2, further comprising the step of selecting, by user selection, a certain one of said local anatomic environments from said library and including it into said ~~main~~-virtual anatomic environment.

15. (Currently Amended) A method according to claim 5, further comprising the step of selecting, by user selection, a certain one of said local anatomic environments from said library and including it into said ~~main~~-virtual anatomic environment.

16. (Currently Amended) A device according to claim 8, wherein the main virtual anatomic environment is arranged to model an internal cavity of a human, ~~such as an abdominal cavity or a chest cavity~~, while the set of local anatomic environments is arranged to simulate different arrangements of arteries, veins and ducts around an organ arranged in said internal cavity, ~~such as a gall bladder or a heart~~.

17. (Currently Amended) A device according to claim 9, wherein the main virtual anatomic environment is arranged to model an internal cavity of a human, ~~such as an abdominal cavity or a chest cavity~~, while the set of local anatomic environments is arranged to simulate different arrangements of arteries, veins and ducts around an organ arranged in said internal cavity, ~~such as a gall bladder or a heart~~.

18. (Currently Amended) A device according to claim 10, wherein the main virtual anatomic environment is arranged to model an internal cavity of a human, ~~such as an abdominal cavity or a chest cavity~~, while the set of local anatomic environments is arranged to simulate different arrangements of arteries, veins and ducts around an organ arranged in said internal cavity, ~~such as a gall bladder or a heart~~.

19. (Previously Presented) A computer-based minimal-invasive surgery simulation system, comprising a device for generating a virtual anatomic environment as described in claim 8.

20. (Previously Presented) A computer-based minimal-invasive surgery simulation system, comprising a device for generating a virtual anatomic environment as described in claim 9.

21. (New) A method according to claim 1, wherein components included in the local anatomic environment are excluded in the main virtual anatomic environment.

22. (New) A device according to claim 7, wherein components included in the local anatomic environments are excluded in the main virtual anatomic environment.